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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,332	04/19/2001	Bart Gerard Boucherie	740612-167	8559

22204 7590 10/23/2002

NIXON PEABODY, LLP  
8180 GREENSBORO DRIVE  
SUITE 800  
MCLEAN, VA 22102

EXAMINER

DEL SOLE, JOSEPH S

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 10/23/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/837,332

Applicant(s)

BOUCHERIE, BART GERARD

Examiner

Joseph S. Del Sole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s): \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-2 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,379,139 in view of Boucherie (6,051,176).

The limitations of claims 1 and 2 of US6,379,139 teach the invention of claims 1 and 2 of the present application except US 6,379,139 fails to teach a rotatable carrier arm mounted for rotation about an axis with the mold inserts being attached to the carrier arm and the two groups being arranged on opposite sides of the rotatable carrier arm.

Boucherie (6,051,176) teaches a rotatable carrier arm (Fig 1, #31) mounted for rotation about an axis (defined by Fig 1, #33) with mold inserts (Fig 1, #16 and #17) being attached to the carrier arm, and the two groups (Fig 2) are arranged on opposite sides of the rotatable carrier arm for the purpose of injection molding two different plastic components in succession to form a toothbrush (col 2, lines 36-54).

It would have been obvious to one having ordinary skill in the art to have combined the invention of claims 1-2 of US 6,379,139 with the rotatable carrier arm taught by Boucherie (6,051,176) because it enables a body formed in a first mold cavity of a first plastic component to be transferred to a second mold cavity to be additionally formed with a second plastic component.

3. Claims 1-2 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,379,139 in view of Boucherie (EP 0 836 923 A1).

The limitations of claims 1 and 2 of US6,379,139 teach the invention of claims 1 and 2 of the present application except US 6,379,139 fails to teach a rotatable carrier arm mounted for rotation about an axis with the mold inserts being attached to the carrier arm and the two groups being arranged on opposite sides of the rotatable carrier arm.

Boucherie (EP 0 836 923 A1) teaches a rotatable carrier arm (Fig 1, #31) mounted for rotation about an axis (defined by Fig 1, #33) with mold inserts (Fig 1, #16 and #17) being attached to the carrier arm, and the two groups (Fig 2) are arranged on opposite sides of the rotatable carrier arm for the purpose of injection molding two different plastic components in succession to form a toothbrush (col 2, line 41 - col 3, line 2).

It would have been obvious to one having ordinary skill in the art to have combined the invention of claims 1-2 of US 6,379,139 with the rotatable carrier arm taught by Boucherie (EP 0 836 923 A1) because it enables a body formed in a first mold

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cavity of a first plastic component to be transferred to a second mold cavity to be additionally formed with a second plastic component.

4. Claims 1-2 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,379,139 in view of Wolfgang et al (DE19522122).

The limitations of claims 1 and 2 of US6,379,139 teach the invention of claims 1 and 2 of the present application except US 6,379,139 fails to teach a rotatable carrier arm mounted for rotation about an axis with the mold inserts being attached to the carrier arm and the two groups being arranged on opposite sides of the rotatable carrier arm.

Wolfgang et al (DE19522122) teach a rotatable carrier arm (Fig 5, #13(12)) mounted for rotation about an axis (defined by Fig 5, #17(17')) with mold inserts (Fig 5, #20 and #21) being attached to the carrier arm and the two groups (Fig 5) are arranged on opposite sides of the rotatable carrier arm for the purpose of injection molding two different plastic components in succession to form a toothbrush (abstract).

It would have been obvious to one having ordinary skill in the art to have combined the invention of claims 1-2 of US 6,379,139 with the rotatable carrier arm taught by Wolfgang et al (DE19522122) because it enables a body formed in a first mold cavity of a first plastic component to be transferred to a second mold cavity to be additionally formed with a second plastic component.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Boucherie (6,051,176).

Boucherie (6,051,176) teaches a tool for injection molding of toothbrush bodies of at least two different plastics components injection-molded in succession (col 1, lines 31-44 and col 2, lines 36-54), the tool comprising tool mold parts which can be moved relative to each other (Fig 4, #4 and #8 are the first part and Fig 4, #16 and #17 are the second mold part) and together comprise two groups of parallel mold cavities, and further comprise a rotatable carrier arm (Fig 6, #31) mounted for rotation about an axis, with one of the mold parts (Fig 4, #4 and #8) comprising a recess for each group of mold cavities, a mold insert (Fig 6, #16 and #17) being insertable into the recess; partial cavities being formed in the mold inserts, which partial cavities each correspond to a head portion of the toothbrush bodies (Fig 3); a first one of the plastics components being injected into a first one of the groups of mold cavities, and a second one of the plastics components being injected into a second one of the groups of mold cavities (Fig 1, #11 and #13); the mold cavities of the first and second groups are arranged on opposite sides of the rotatable carrier arm (Fig 13) and the mold inserts are attached to the carrier arm (Fig 1); the mold cavities are arranged in each group parallel to each other and so as to have an identical orientation (Fig 2 and Fig 13); the mold cavities of the first group are arranged so as to lie opposite the mold cavities of the second group (Fig 2 and Fig 13); the mold cavities of the first group are arranged with respect to the

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axis of the carrier arm so as to be point-symmetric to the mold cavities of the second group (Fig 2 and Fig 13); each group is constituted by a pair of subgroups (Fig 13); and in each pair of subgroups, the mold cavities of one subgroup are arranged so as to be aligned with the mold cavities of another subgroup (Fig 13).

7. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Boucherie (EP 0 836 923 A1).

Boucherie (EP 0 836 923 A1) teaches a tool for injection molding of toothbrush bodies of at least two different plastics components injection-molded in succession (col 1, lines 27-41 and col 2, line 41 - col 3, line 2), the tool comprising tool mold parts which can be moved relative to each other (Fig 4, #4 and #8 are the first part and Fig 4, #16 and #17 are the second mold part) and together comprise two groups of parallel mold cavities, and further comprise a rotatable carrier arm (Fig 6, #31) mounted for rotation about an axis, with one of the mold parts (Fig 4, #4 and #8) comprising a recess for each group of mold cavities, a mold insert (Fig 6, #16 and #17) being insertable into the recess; partial cavities being formed in the mold inserts, which partial cavities each correspond to a head portion of the toothbrush bodies (Fig 3); a first one of the plastics components being injected into a first one of the groups of mold cavities, and a second one of the plastics components being injected into a second one of the groups of mold cavities (Fig 1, #11 and #13); the mold cavities of the first and second groups are arranged on opposite sides of the rotatable carrier arm (Fig 13) and the mold inserts are attached to the carrier arm (Fig 1); the mold cavities are arranged in each group parallel to each other and so as to have an identical orientation (Fig 2 and Fig 13); the mold cavities of the first group are arranged so as to lie opposite the mold cavities of the



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second group (Fig 2 and Fig 13); the mold cavities of the first group are arranged with respect to the axis of the carrier arm so as to be point-symmetric to the mold cavities of the second group (Fig 2 and Fig 13); each group is constituted by a pair of subgroups (Fig 13); and in each pair of subgroups, the mold cavities of one subgroup are arranged so as to be aligned with the mold cavities of another subgroup (Fig 13).

#### ***References of Interest***

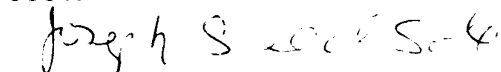
8. Boucherie (5,609,890) and Vinal (2,520,263) are cited of interest to show the state of the art.

#### ***Correspondence***

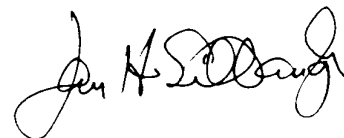
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (703) 308-6295. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jan Silbaugh, can be reached at (703) 308-3829. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for non-after finals and (703) 872-9311 for after finals.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



J.S.D.  
October 18, 2002



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10/19/02